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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/509,425	04/11/2005	Tsuguo Fukuda	042592	7441

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EXAMINER

KOSLOW, CAROL M

ART UNIT	PAPER NUMBER
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1755

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/18/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/509,425

Applicant(s)

FUKUDA ET AL.

Examiner

C. Melissa Koslow

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 2 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1 is/are rejected.
- 7) ☒ Claim(s) 2 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 4/11/05 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date ____.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- ☐ Notice of Informal Patent Application
- ☐ Other: ____.

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The information disclosure statement filed 25 September 2004 fails to comply with the provisions of 37 CFR 1.97, 1.98 and MPEP § 609 because the articles do not include the required titles. It has been placed in the application file, but the information referred to therein has not been considered as to the merits. Applicant is advised that the date of any re-submission of any item of information contained in this information disclosure statement or the submission of any missing element(s) will be the date of submission for purposes of determining compliance with the requirements based on the time of filing the statement, including all certification requirements for statements under 37 CFR 1.97(e). See MPEP § 609.05(a).

Claim 2 is objected to because of the following informalities: $\text{LaR}_2\text{Ga}_3\text{O}_{12}$ should be $\text{La}_3\text{R}_2\text{Ga}_3\text{O}_{12}$. Appropriate correction is required.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by the article by

Guerassimova et al.

This article teaches ytterbium doped yttrium aluminum garnet single crystal having the formula $(\text{Y}_{1-x}\text{Yb}_x)_3\text{Al}_3\text{O}_{12}$, where x is 0.1 and 0.15. The taught amount of Yb and Y meet the claimed inequalities. The article teaches the claimed material. The recitation of the intended use of the claimed invention does not result in a structural difference between the claimed invention

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and the prior art and thus does not patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim.

Claim 1 is rejected under 35 U.S.C. 102(a) as being anticipated by the article by Yoshikawa et al

This article teaches ytterbium doped yttrium aluminum garnet single crystal having the formula $(Y_{1-x}Yb_x)_3Al_3O_{12}$, where x is 0.05, 0.17 and 0.3 and ytterbium doped lutetium aluminum garnet single crystal having the formula $(Lu_{0.67}Yb_{0.33})_3Al_3O_{12}$. The taught amount of Yb and Lu meet the claimed inequalities. The article teaches the claimed material. The recitation of the intended use of the claimed invention does not result in a structural difference between the claimed invention and the prior art and thus does not patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim.

Claim 2 would be allowable if rewritten or amended to overcome the objection, set forth in this Office action.

There is no teaching or suggestion in the cited art or record of an ytterbium doped garnet having the claimed formulas.

U.S. patents 6,030,449 and 5,866,092 are cited as of interest since they teach $La_{8-(x+y)}Yb_xGa_yO_{12}$, where x is 1-3, y is 2.5-4.5 and (x+y) is 5-6.5 and $Gd_{8-(x+y)}Yb_xGa_yO_{12}$, where x is 1-3, y is 2.5-4.5 and (x+y) is 5-6.5. There is no suggestion or teaching in the cited art of record to replace the majority of ytterbium with yttrium or lutetium in the taught formulas. There is no suggestion or teaching in the cited art of record to replace the majority of ytterbium with gadolinium in the taught formula $La_{8-(x+y)}Yb_xGa_yO_{12}$. There is no teaching or suggestion in U.S.

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patent 5,866,092 that x can be 1. The article by Sablayrolles et al is cited as of interest since it teaches ytterbium doped $\text{Li}_6\text{Y}(\text{BO}_3)_3$, but the article was published 19 March 2005, which is after applicants' filing date of 25 March 2003.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melissa Koslow whose telephone number is (571) 272-1371. The examiner can normally be reached on Monday-Friday from 8:00 AM to 3:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jerry Lorengo, can be reached at (571) 272-1233.

The fax number for all official communications is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

cmk
April 12, 2007


C. Melissa Koslow
Primary Examiner
Tech. Center 1700